

ABSTRACT OF THE DISCLOSURE

A small ball is formed at the lower end of a second gold wire that is held and guided by a second capillary.

5 The small ball has a diameter approximately equal to that of a first gold wire. The small ball is bonded to an electrode on an optical device. The second gold wire is separated from the small ball. A large ball is formed at the lower end of the first gold wire that is held and

10 guided by a first capillary. The large ball is bonded to a wiring pattern on an external wiring substrate. The first capillary is moved upward, and then, moved toward the small ball in the horizontal direction. A bonding wire is formed with the first gold wire connecting with the large ball.

15 The first gold wire is bonded to the small ball by stitch bonding, and then, separated from the small ball.